

In re HAIMOVSKY ET AL., Application No. 10/042,846
Amendment D

Amendments to the Drawings:

The attached sheet of drawings includes changes to FIGs. 1 and 2. These two sheets replace the original sheets including FIGs. 1 and 2. FIGs. 1 and 2 now expressly contain the claim limitations requested by the Office.

Attachment: Two Replacement Sheets
Two Annotated Sheets Showing Changes

REMARKS

The final Office action dated June 19, 2006, and the references cited have been fully considered. In response, please enter the enclosed Request for Continued Examination (RCE) and the following amendments, and consider the following remarks. Reconsideration and/or further prosecution of the application is respectfully requested. No new matter is added herein.

First, Applicants have added new claims 52-57 herein, which are based on pending claims 8, 31, 32, 35, 37, and 38 respectively, with claims 52-57 not including the limitations directed to the "second slave system". Support for claims 52-57 are provided by claims 8, 31, 32, 35, 37, and 38 respectively, as well as the originally filed specification which discusses the booting of a first slave system such as on, but not limited, pages 8 and 9 of the originally filed application. Furthermore, claims 52-57 are believed to be allowable for at least the reasons presented herein and previously presented in this application in regards to claims 8, 31, 32, 35, 37, and 38.

Applicants appreciate the Office's efforts in preparing the text and figures of the application for issuance. In this regards, first, Applicants respectfully traverse the rejection of the amendment to the specification as the amendment does not introduce new matter for at least the reasons described in MPEP 2163.07, as the rephrasing of a definition consistent with common usage is not new matter. Additionally, Applicants have rendered the objection as currently being moot as Applicants have amended the paragraph at issue to return it to that as original filed; while expressly reserving the right to represent this amendment in the future in this application or a continuation thereof. Applicants therefore respectfully request that this objection be withdrawn. Next, Applicants have included new FIGs. 1 and 2 to expressly recite the claim limitations requested by the Office, with support provided by the claims and originally filed application, including, but not limited to pages 8, 9, 12 and 13. For at least these reasons, Applicants respectfully request the objections to the drawings be withdrawn. For at least these reasons, Applicants respectfully request all objections be withdrawn.

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Turning to the rejections of the claims based on prior art, claims 8, 31, 32, 35, 36, 37, and 38, stand rejected based on the plethora of references of:

- 1) Haigh et al., US Patent Application Publication 2002/0087854 A1, in view of
- 2) Haisraeli, US Patent Application Publication 2004/0015846 A1, in view of
- 3) Rahman et al., US Patent 5,539,890, in view of
- 4) Jeffries, US Patent 5,636,342, in view of
- 5) page 23 of Getting Started with Microsoft Windows 98.

Other claims are rejected based on this massive combination of references, along with Official Notice and/or the newly cited reference of Bair et al., US Patent 5,577,050.

Applicants respectfully traverse the rejections as the Office fails to present a *prima facie* case of obvious for at least failing to provide a rejection for each and every limitation; nor provides a coherent rejection when combining multiple references. It is well-established law that the burden is on the Office to initially present a *prima facie* unpatentability (e.g., anticipation, obvious) rejection, before Applicant has any burden of proof of disproving any application of a cited reference against a claim. *In re Warner*, 379 F2d. 1011, 1016, 154 USPA 173, 177 (C.C.P.A. 1967); *Ex parte Skinner*, 2 USPQ2d 1788, 1788-89 (B.P.A.I. 1986). Moreover, the Office action at least fails to comply with MPEP § 2141.02 and the requirements pronounced by the Federal Circuit for requiring consideration of the claimed invention as a whole; rather than a hindsight, piecemeal analysis of claim elements/limitations as the Office has done in formulating its rejection of a pending claim.

In regards to independent claim 8, and its dependent claims 31-32 and 35-38, claim 8 recites the interrogation of the first and second slave systems in order to identify the characteristics, and responsive to the interrogation and said identified characteristics, the master system determines which remote boot image to use, and updates the programmable interfaces accordingly. The Office relies on Haigh et al., and cites its paragraphs 15, 26, 39-30, 33-36 and 222 for teaching this. Additionally, the Office action states that Haigh et al. uses "parameters to

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identify the slaves" ... Applicants note that Haigh et al. uses the term "parameters" to refer to different things - i.e., the arguments to a command - wherein the claim limitation is directed to interrogating to identify - an active operation; wherein the Office cites a passive parameter which neither teaches nor suggests the claim limitations to which it is being applied in the Office action. Moreover, Applicants fail to see any portion of such teaching by Haigh et al. In contrast to the claimed invention, Haigh et al. is directed to a computer system having multiple single computer boards that share a physical storage device. BIOS command 214 includes parameters (e.g., where the boot image is located on the remote disk) different from convention parameters pointing to a local disk (which there is none) which cause the parameters to be sent to host system, which reads the boot image from its disk and forwards to the requesting SBC. Haigh et al. neither teaches nor suggests the interrogation, nor the updating of the programmable interfaces as recited by independent claim 8. Remember, claim 8 is not claiming any method of booting from a remote boot image; rather claim 8 recites a different and specific mechanism which operates in a non-obviousness way from the prior art of record. Applicants respectfully submit that the recited limitations make independent claim 8 patentably distinct from the prior art of record.

Applicants respectfully traverse the use of Haisraeli as the release to which the Office references is the slave system, wherein the claim limitation goes to the release of the system controllers; and the Office is using this reference to modify Haigh et al. and its characterization as a system controller as Haigh et al.'s BMI controller and associated circuitry, and therefore Haisraeli would need to teach releasing Haigh et al.'s BMI controller and associated circuitry. Applicants note that the term "system controller" is no where to be found in Haisraeli, so Applicants are perplexed on how Haisraeli can teach the recited limitation of releasing the "system controllers". Moreover, the claim limitation requires a temporal releasing of the system controllers in relation to other limitations, and a proper rejection requires the Office to present such a teaching. Furthermore, the rational for the combination of Haisraeli with Haigh et al. is

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"to test hierarchical systems such as Haigh's" - yet Haisraeli is directed to a networked system, which is not taught by Haigh et al.

Rahman et al. neither teaches nor suggests neither teaches nor suggests the interrogation of the first and second slave systems in order to identify the characteristics, and responsive to the interrogation and said identified characteristics, the master system determines which remote boot image to use, and updates the programmable interfaces accordingly.

The Office action does not make clear to Applicants its use of Jefferies et al.; and its apparent use is directed to automatically assigning addresses to slaves in a system which is not an expressly recited limitation in claim 8.

Applicants respectfully traverse the use page 23 of Getting Started with Microsoft Windows 98 as it fails to teach a recited claim limitation. Moreover, let's be clear to what this page teaches. This book was provided with a set of diskettes which contained the Windows 98 OS. It teaches, before the human user installs (e.g., use these diskettes to put a copy on the hard disk of the computer), that the human user to make sure that it at least has a certain processor, enough memory, and adequate space on the hard drive. This neither teaches nor suggests interrogating the first/second slave systems by the master system, nor to determine the remote boot image to use for each slave system, nor to cause the retrieval of the identified boot image as recited in claim 8. Rather, this is a one-time installation of an operating system onto a hard drive of a computer.

Moreover, Applicants respectfully submit that the Office action at least fails to comply with MPEP § 2141.02 and the requirements pronounced by the Federal Circuit for requiring consideration of the claimed invention as a whole; rather than a hindsight, piecemeal analysis of claim elements/limitations as the Office has done in formulating its rejection of a pending claim.

Since 1983, the Federal Circuit has applied the requirement that obviousness must be proved with specific evidence that the prior art teaches, suggests, or provides a motivation to make the combination claimed in a patent in order to protect against improper hindsight analysis of prior art. In *W.L. Gore & Associates Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 .

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(Fed. Cir. 1983), the late Chief Judge Howard Markey wrote as follows: “To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher.”

The Federal Circuit has more succinctly described a requirement of 35 USC § 103 at issue in this case.

In making the assessment of differences, section 103 specifically requires consideration of the claimed invention “as a whole.” Inventions typically are new combinations of existing principles or features. *Env'l. Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698 (Fed. Cir. 1983) (noting that “virtually all [inventions] are combinations of old elements.”). The “as a whole” instruction in title 35 prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might break an invention into its component parts (A + B + C), then find a prior art reference containing A, another containing B, and another containing C, and on that basis alone declare the invention obvious. This form of hindsight reasoning, using the invention as a roadmap to find its prior art components, would discount the value of combining various existing features or principles in a new way to achieve a new result – often the very definition of invention.

Section 103 precludes this hindsight discounting of the value of new combinations by requiring assessment of the invention as a whole. This court has provided further assurance of an “as a whole” assessment of the invention under § 103 by requiring a showing that an artisan of ordinary skill in the art at the time of invention, confronted by the same problems as the inventor and with no knowledge of the claimed invention, would select the various elements from the prior art and combine them in the claimed manner. In other words, the examiner or court must show some suggestion or motivation, before the invention itself, to make the new combination. See *In re Rouffet*, 149 F.3d 1350, 1355-56 (Fed. Cir. 1998).

Ruiz v. A.B. Chance Co., 69 USPQ2d 1686, 1690 (Fed. Cir. 1984).

The Office action takes the initial reference of Haigh et al. and then adds a plethora of references based on the recipe of the recited claim limitations, which directly conflicts with the law of the Federal Circuit. Moreover, the Office action starts with the system of Haigh et al., which is directed to allowing multiple single board computers (SBCs) to share a disk attached to

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one of the SBCs. Then, the Office presents that an inventor in possession of Haigh et al. would want to (sic) "testing requires synchronized release between master and slave," "to reduce overhead and maintenance in a network system," and a page from the Windows 98 installation manual reminding the user to make sure the computer can handle Windows 98 before installing to its hard drive. Applicants respectfully traverse and make a demand for evidence how one considering the claimed invention as a whole as required by 35 USC § 103 would come up with the system recited in claim 8. Apparently, the Office believes that, by solving a host of unrelated problems not apparent in Haigh et al. nor how or why one in possession of Haigh et al would seek to address, the system recited in claim 8 might by chance be developed. Applicants traverse this analysis and the logic employed in the Office action, and do not believe that a system resulting from a per chance solving a bunch of unrelated problems (which could be solved differently and therefore would not result in the system presented by the Office) provides a proper teaching or motivation under 35 USC § 103.

Further in regards to claim 37, Applicants traverse the Office taking Official Notice of the translation as recited in claim 37 and make a "demand for evidence" for the recited limitation as Applicants are unaware of such address translation by the first programmable interface, and the Office equates Haigh et al.'s BMI and associated circuitry, and therefore, Applicants request a specific teaching to modify Haigh et al.'s BMI and associated circuitry to perform such address translation. Applicants appreciate the Office citing Bair et al., US Patent 5,577,050 for teaching "address translation." The address translation of Bair et al. teaches nothing directed towards the recited limitation of claim 37, rather it teaches that address to defective memory cells can be redirected to working memory cells.

For at least these reasons, Applicants respectfully request the rejections of independent claim 8 and its dependent claims 31-32 and 35-38 be withdrawn and these claims be allowed. Moreover, claims 52-57 are allowable for at least these reasons, and therefore request that these claims also be allowed.

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Additionally, the Office relies on these same statement of rejections for rejecting all other claims. For at least the same reasons as presented herein, Applicants request the rejections of all pending claims be withdrawn, all claims be allowed, and the application passed to issuance.

Again, It is well-established law that the burden is on the Office to initially present a *prima facie* unpatentability rejection, *before* Applicant has any burden of proof of disproving any application of a cited reference against a claim.

FINAL REMARKS. In view of the above remarks and for at least the reasons presented herein, all pending claims are believed to be allowable over the prior art of record, the application is considered in good and proper form for allowance, and the Office is respectfully requested to issue a timely Notice of allowance in this case. If, in the opinion of the Office, a telephone conference would expedite the prosecution of the subject application, the Office is invited to call the undersigned attorney.

Applicants believe a three-month extension of time is required, and hereby petitions any extension of time required and has included herewith a credit card payment form (PTO-2038) for payment of the extension fee, and Applicants hereby authorize the Commissioner to charge/credit any additional associated fees to Deposit Account No. 501430.

Respectfully submitted,
The Law Office of Kirk D. Williams

Date: December 19, 2006

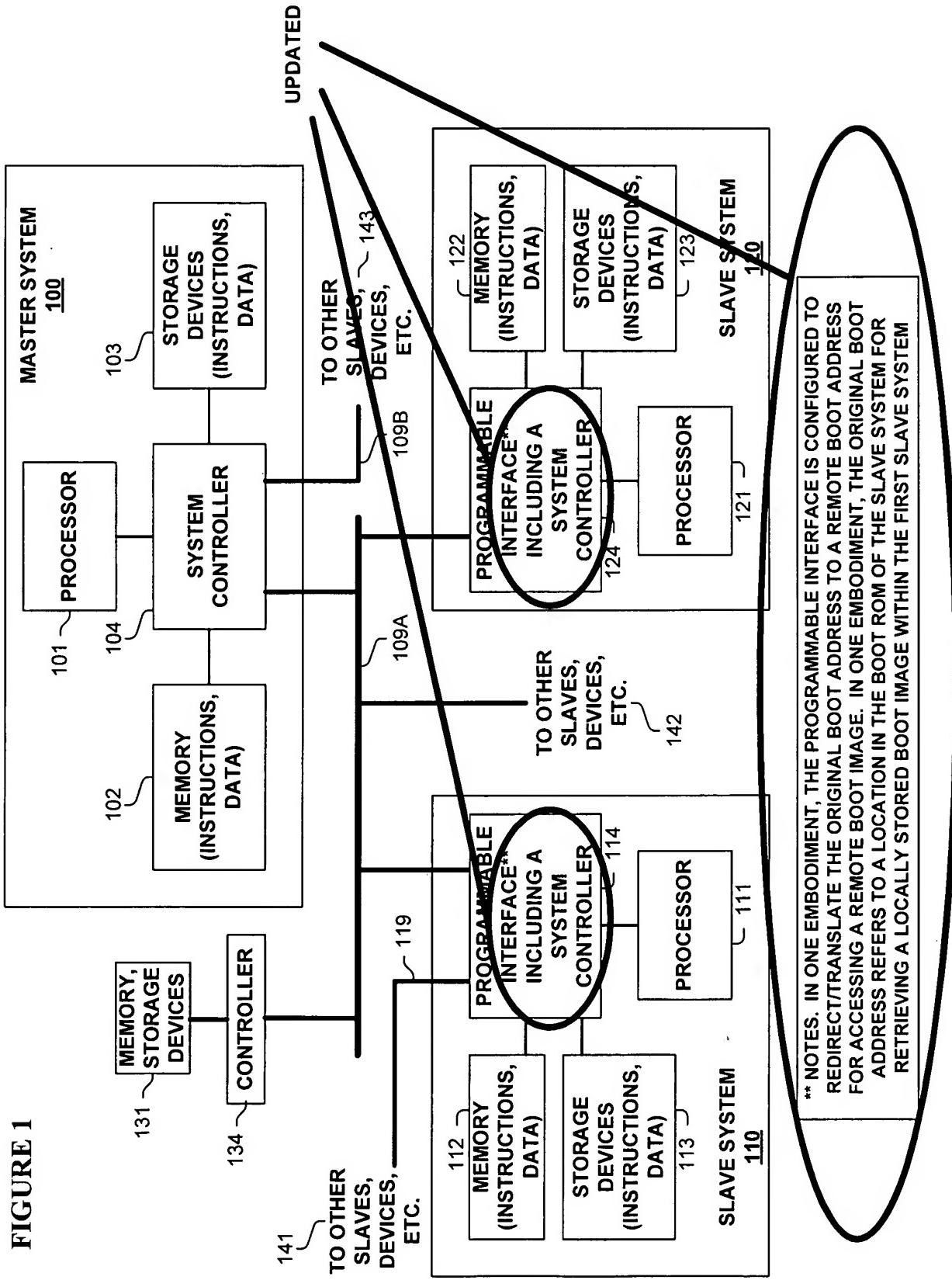
By



Dec 19, 2006

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FIGURE 1



** NOTES. IN ONE EMBODIMENT, THE PROGRAMMABLE INTERFACE IS CONFIGURED TO REDIRECT/TRANSLATE THE ORIGINAL BOOT ADDRESS TO A REMOTE BOOT ADDRESS FOR ACCESSING A REMOTE BOOT IMAGE. IN ONE EMBODIMENT, THE ORIGINAL BOOT ADDRESS REFERS TO A LOCATION IN THE BOOT ROM OF THE SLAVE SYSTEM FOR RETRIEVING A LOCALLY STORED BOOT IMAGE WITHIN THE FIRST SLAVE SYSTEM

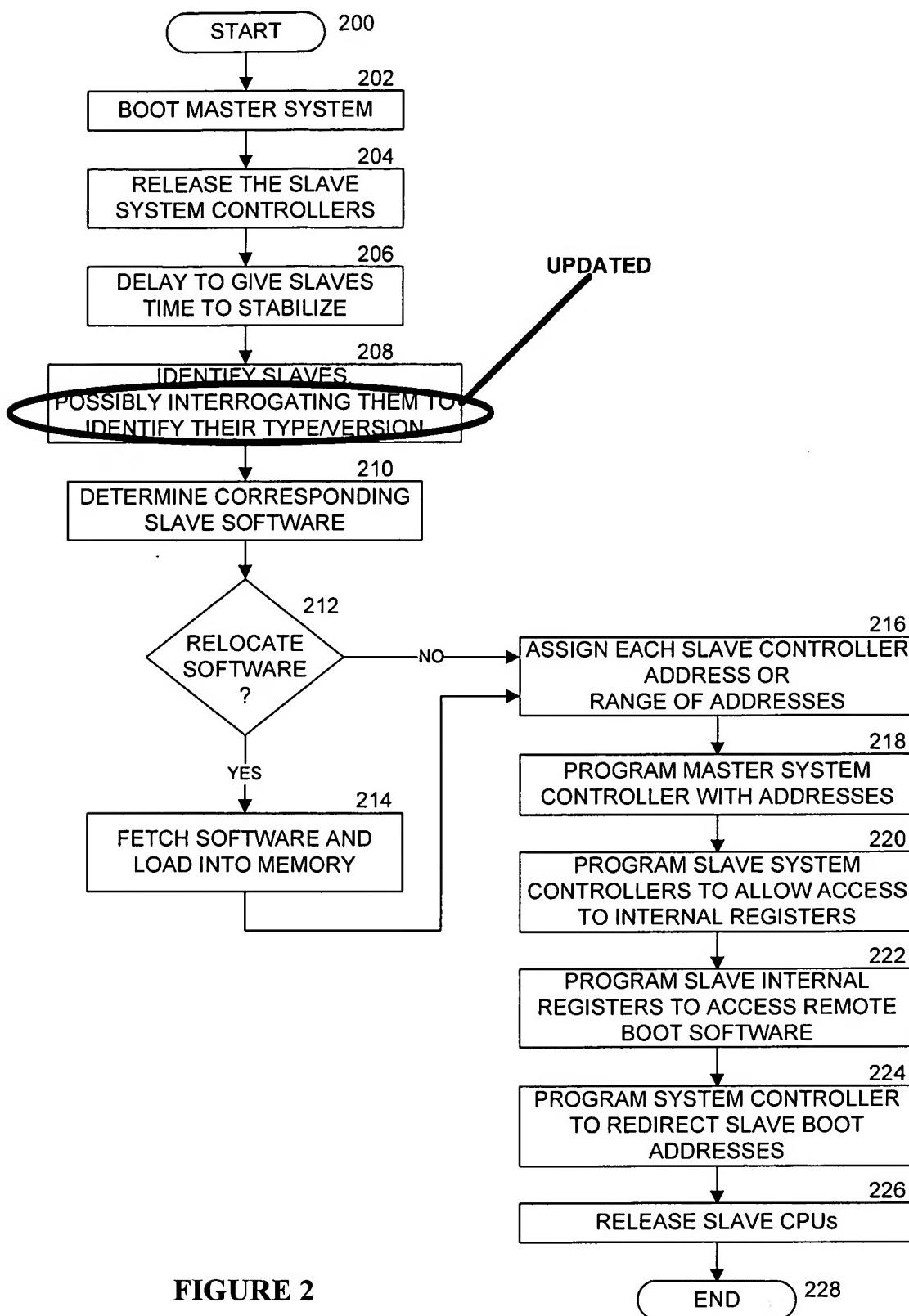


FIGURE 2